

# General preconditions for register-based statistical system

Side event to the 39th session of the UNSC  
27 February 2008

Hilkka Vihavainen  
Statistics Finland



## Outline

- Background – experience of Statistics Finland
- General preconditions
- Strengths and weaknesses
- Some concluding remarks

## Use of administrative data at Statistics Finland

- Long experience: linkage of administrative data with 1970 Population Census data
- First in social and demographic statistics, nowadays more and more in business and environmental statistics
- Currently about 96% of input data from administrative sources (as measured in number of statistical units times number of variables)
- Numerous direct data collection for business (restricted mainly to large enterprises) and social statistics still exists

## Ways of utilising administrative data

- Direct use of register data in statistics production
- Register estimation
- Combined use of survey and register data
  - additional information from registers
  - use as sampling frame
  - non-response control
  - imputation
  - determining the structure of non-response

## General preconditions: Legal basis

### ■ Statistics Act

- access to administrative data sources
- use of administrative data compulsory, if data exists
- government agencies have obligation to deliver data to the NSI
- no power to dictate the contents of administrative registers; only power of persuasion

### ■ Personal Data Act

- defines strict confidentiality rules
- allows linkage of data for statistical purposes

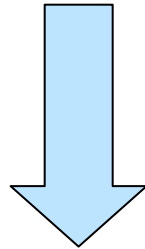
A man with dark hair and a light beard is looking down at a laptop screen. He is wearing a light blue t-shirt. The background is a kitchen with yellow cabinets and a white coffee cup on a counter.

## Public approval

- Understanding the basic philosophy behind the approach
- Rationality
- Cost efficiency
- Lower response burden
- In some countries: Fears about "Big Brother"

## Unified identification code systems

- Personal identification numbers
- Business identification codes
- Dwellings, buildings etc.



In wide use in administration

## Comprehensive and reliable register system built for administrative purposes

- Closely related to the development of taxation, social security and other administrative needs
- From manual processing to electronic data processing
- Often national registers
- eGovernment initiatives



## Co-operation among administrative authorities

- Commitment from the highest possible level
- Close contacts with register authorities
  - right to influence
  - influence by cooperation
- Development of Population and Housing Census
  - a good starting point



## Preconditions: summary

Universal ID-schemes

- Persons
- Organisations
- Buildings, dwellings

→ WIDE use →

Well developed  
IT infrastructure  
in administration

Acceptance by people,  
business and administration

Possibility  
to use in  
statistics,  
also  
to  
COMBINE

Strict confidentiality in statistics

Up-to-date legislation

- statistics act
- personal data protection act

## Strengths of register-based statistics production

- Total coverage at low cost
- Possibility to link with other data sources (common identifiers) and to produce new type of data and statistics
- Quality of data: heavy sanctions for enterprises if data are not delivered or if false data are delivered to tax authorities
- No additional burden to respondents
- Confidentiality advantages

## Weaknesses of register-based statistics production

- Only variables covered by registers are available
- Some restrictions on definitions of units and variables
- Vulnerable to changes in legislation and administrative practices
- Dependence on data suppliers
- Timeliness of administrative data is not always good enough

## Some concluding remarks

- Quality assurance and quality control systems needed
- Survey data – also for quality checking of administrative data
- Internal co-ordination important within the NSI
- NSI has to enhance and initiate horizontal co-operation in Public Administration
- This co-operation with the authorities requires resources
- Register competence and knowledge essential
- All win:
  - lower response burden
  - administrative authorities can show “added value”
  - somewhat lower costs of the NSI but extremely rich and useful data files